

(19) United States

(12) Patent Application Publication (10) Pub. No.: US 2017/0048733 A1 Dalsgaard et al.

(43) **Pub. Date:**

Feb. 16, 2017

(54) MINIMUM MEASUREMENT REQUIREMENTS FOR MULTI-BROADCAST SINGLE-FREQUENCY NETWORK **MEASUREMENTS**

(71) Applicant: Nokia Technologies Oy, Espoo (FI)

(72) Inventors: Lars Dalsgaard, Oulu (FI); Ilkka Keskitalo, Oulu (FI)

(73) Assignee: Nokia Technologies Oy, Espoo (FI)

15/306,440 (21) Appl. No.:

(22) PCT Filed: May 6, 2015

(86) PCT No.: PCT/FI2015/050306

§ 371 (c)(1),

Oct. 24, 2016 (2) Date:

Related U.S. Application Data

(60) Provisional application No. 61/990,993, filed on May 9, 2014.

Publication Classification

(51) Int. Cl. H04W 24/08 (2006.01)H04W 24/02 (2006.01)H04W 76/04 (2006.01)H04W 72/00 (2006.01)

(52) U.S. Cl.

CPC H04W 24/08 (2013.01); H04W 72/005 (2013.01); H04W 24/02 (2013.01); H04W **76/048** (2013.01); *H04W* 88/02 (2013.01)

ABSTRACT (57)

Various communication systems may benefit from welldefined measurement requirements. For example, measurements for multi-broadcast single-frequency networks (MB-SFNs) may benefit from definition of minimum measurement requirements related to, for example, reference signal received power (RSRP) and reference signal received quality (RSRQ). A method may include obtaining MBMS configuration parameters. The method may also include defining generic minimum MBSFN measurement performance requirements, based on the MBMS configuration parameters.

